

ABSTRACT

A crankcase scavenged two-stroke engine (1) comprises a  
5 cylinder (15) including scavenging ports (31, 31') and at  
least one exhaust port, a piston (13), a connecting rod (17),  
a crankshaft (18) and a generally sealed crankcase (16). The  
crankcase inducts a fuel/air mixture and is connected to the  
scavenging ports (31, 31') by means of transfer ducts (3, 3')  
10 which, as the piston (13) is travelling from a lower position  
towards a higher position, are inducting pure air let in from  
connecting ports (8, 8') near the scavenging ports (31, 31')  
in the cylinder (15). The transfer duct (3, 3') volume is  
less than 20% of a volume swept by the piston (13) during an  
15 entire revolution of the crankshaft (18). Recesses (10, 10')  
are formed in an outer periphery of the piston (13), said  
recesses (10, 10') co-operating with the connecting ports (8,  
8') in the cylinder wall for controlling the filling of the  
transfer ducts (3, 3') with air. An inlet tube (22) in the  
20 cylinder wall supplies the air/fuel mixture, said inlet tube  
(22) being connected to the crankcase (16) and covered by the  
piston (13) as the piston (13) is in the lower position, and  
open to the crankcase (16) as the piston (13) is in the  
higher position.

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FIG 1